

AMENDMENTS TO THE CLAIMS

Claims 1-15 (Cancelled).

16. (Currently Amended) ~~The lash adjuster of claim 14;~~ A lash adjuster for use in a valve gear, comprising:

a lifter body to be axially slidably mounted in a valve opening-and-closing transmission path to transmit a force from a cam to a valve through a valve stem;

a nut member on said lifter body, said nut member having female threads;

an adjuster screw having peripheral male threads engaging said female threads of said nut member, said adjuster screw being shaped and arranged to move axially by rotating within said nut member so as to automatically adjust a valve clearance; and

an elastic member for axially biasing said adjuster screw;

wherein said female threads of said nut member and said male threads of said adjuster screw are each serration-shaped so as to have pressure flanks to be acted on by an axial push-in force to be applied to said adjuster screw and so as to have clearance flanks, a flank angle of said pressure flanks being greater than a flank angle of said clearance flanks;

wherein a pressure-side thread surface of one or both of said adjuster screw and said nut member is formed of a material that will not react with oil additives of oil containing organic molybdenum so as to suppress formation of a tribochemical reactive layer between said thread surfaces; and

wherein said pressure-side thread surface of one or both of said adjuster screw and said nut member has a ceramic film formed thereon.

17. (Currently Amended) ~~The lash adjuster of claim 14;~~ A lash adjuster for use in a valve gear, comprising:

a lifter body to be axially slidably mounted in a valve opening-and-closing transmission path to transmit a force from a cam to a valve through a valve stem;

a nut member on said lifter body, said nut member having female threads;

an adjuster screw having peripheral male threads engaging said female threads of said nut member, said adjuster screw being shaped and arranged to move axially by rotating within said nut member so as to automatically adjust a valve clearance; and

an elastic member for axially biasing said adjuster screw;

wherein said female threads of said nut member and said male threads of said adjuster screw are each serration-shaped so as to have pressure flanks to be acted on by an axial push-in force to be applied to said adjuster screw and so as to have clearance flanks, a flank angle of said pressure flanks being greater than a flank angle of said clearance flanks;

wherein a pressure-side thread surface of one or both of said adjuster screw and said nut member is formed of a material that will not react with oil additives of oil containing organic molybdenum so as to suppress formation of a tribochemical reactive layer between said thread surfaces; and

wherein said pressure-side thread surface of one or both of said adjuster screw and said nut member is subjected to plating.

18. (Currently Amended) ~~The lash adjuster of claim 14;~~ A lash adjuster for use in a valve gear, comprising:

a lifter body to be axially slidably mounted in a valve opening-and-closing transmission path to transmit a force from a cam to a valve through a valve stem;

a nut member on said lifter body, said nut member having female threads;

an adjuster screw having peripheral male threads engaging said female threads of said nut member, said adjuster screw being shaped and arranged to move axially by rotating within said nut member so as to automatically adjust a valve clearance; and

an elastic member for axially biasing said adjuster screw;

wherein said female threads of said nut member and said male threads of said adjuster screw are each serration-shaped so as to have pressure flanks to be acted on by an axial push-in force to be applied to said adjuster screw and so as to have clearance flanks, a flank angle of said pressure flanks being greater than a flank angle of said clearance flanks;

wherein a pressure-side thread surface of one or both of said adjuster screw and said nut member is formed of a material that will not react with oil additives of oil containing organic molybdenum so as to suppress formation of a tribochemical reactive layer between said thread surfaces; and

wherein said pressure-side thread surface of one or both of said adjuster screw and said nut member has a nitride compound layer formed thereon.

19. (Currently Amended) ~~The lash adjuster of claim 14,~~ A lash adjuster for use in a valve gear, comprising:

a lifter body to be axially slidably mounted in a valve opening-and-closing transmission path to transmit a force from a cam to a valve through a valve stem;

a nut member on said lifter body, said nut member having female threads;

an adjuster screw having peripheral male threads engaging said female threads of said nut member, said adjuster screw being shaped and arranged to move axially by rotating within said nut member so as to automatically adjust a valve clearance; and

an elastic member for axially biasing said adjuster screw;

wherein said female threads of said nut member and said male threads of said adjuster screw are each serration-shaped so as to have pressure flanks to be acted on by an axial push-in force to be applied to said adjuster screw and so as to have clearance flanks, a flank angle of said pressure flanks being greater than a flank angle of said clearance flanks;

wherein a pressure-side thread surface of one or both of said adjuster screw and said nut member is formed of a material that will not react with oil additives of oil containing organic molybdenum so as to suppress formation of a tribochemical reactive layer between said thread surfaces; and

wherein said pressure-side thread surface of one or both of said adjuster screw and said nut member has a carbon film formed thereon.

Claim 20 (Cancelled).

21. (Currently Amended) The lash adjuster of claim ~~14~~ 19, wherein said pressure-side thread surface of one or both of said adjuster screw and said nut member has a ~~carbon~~ diamond film formed thereon.

Claim 22 (Cancelled).

23. (Currently Amended) The lash adjuster of claim ~~14~~ 16, wherein said pressure-side thread surface of one or both of said adjuster screw and said nut member has titanium nitride TiN formed thereon.

24. (Currently Amended) The lash adjuster of claim ~~14~~ 16, wherein said pressure-side thread surface of one or both of said adjuster screw and said nut member has chrome nitride formed thereon.

25. (Currently Amended) The lash adjuster of claim 1 ~~14~~ 17, wherein said pressure-side thread surface of one or both of said adjuster screw and said nut member is subjected to Ni-P plating, and a hard particle-dispersed film is formed thereon.

26. (Currently Amended) The lash adjuster of claim 25, wherein said hard particle-dispersed film comprises one of SiC and Si₃N₄.

Claim 27 (Cancelled).